§ 27.320 If a new towing vessel is 24 meters (79 feet) or longer in length, what are the requirements for fire pump, fire main, and fire hose? [Reserved]

§ 27.321 If a new towing vessel is less than 24 meters (79 feet) in length, what are the requirements for fire pump and fire hose? [Reserved]

§ 27.325 If a new towing vessel is 24 meters (79 feet) or longer in length, what type of fire-extinguishing equipment must it carry? [Reserved]

§ 27.326 If a new towing vessel is less than 24 meters (79 feet) in length, what type of fire-extinguishing equipment must it carry? [Reserved]

§ 27.340 What are the requirements for a fuel system on a new towing vessel?

(a) You must ensure that, except for the components of an outboard engine or of a portable bilge pump or fire pump, each fuel system installed on board the vessel meets the requirements of this section.

(b) *Portable fuel systems.* The vessel must not incorporate or carry portable fuel systems, including portable tanks and related fuel lines and accessories, except when used for outboard engines or when permanently attached to portable equipment such as portable bilge or fire pumps. The design, construction, and stowage of portable tanks and related fuel lines and accessories must meet the requirements of ABYC H–25 (incorporated by reference at § 27.102(b)).

(c) *Fuel restrictions.* Neither you nor the operator may use fuel other than bunker C or diesel, except for outboard engines, or where otherwise accepted by the Commandant (G–MSE). An installation that uses bunker C must comply with the requirements of subchapter F of this chapter.

(d) *Vent pipes for integral fuel tanks.* Each integral fuel tank must meet the requirements of this paragraph as follows:

(1) Each fuel tank must have a vent that connects to the highest point of the tank, discharges on a weather deck through a bend of 180 degrees (3.14 radians), and is fitted with a 30-by-30 mesh corrosion-resistant flame screen. Vents from two or more fuel tanks may combine in a system that discharges on a weather deck.

(2) The net cross-sectional area of the vent pipe for the tank must be—

(i) Not less than 312.3 square millimeters (0.484 square inches) for any tank filled by gravity; or

(ii) Not less than that of the fill pipe for any tank filled under pressure.

(e) *Fuel piping.* Except as permitted in paragraphs (e)(1) and (2) of this section, each fuel line must be seamless and made of steel, annealed copper, nickel-copper, or copper-nickel. Each fuel line must have a wall thickness of not less than 0.9 millimeters (0.035 inch) except that—

(1) Aluminum piping is acceptable on an aluminum-hull vessel if it is installed outside the engine room and is at least Schedule 80 in thickness; and

(2) Nonmetallic flexible hose is acceptable if it—

(i) Is used in lengths of not more than 0.76 meters (30 inches);

(ii) Is visible and easily accessible;

(iii) Does not penetrate a watertight bulkhead;

(iv) Is fabricated with an inner tube and a cover of synthetic rubber or other suitable material reinforced with wire braid; and

(v) Either—

(A) If it is designed for use with compression fittings, is fitted with suitable, corrosion-resistant, compression fittings, or fittings compliant with SAE J1475 (incorporated by reference at § 27.102(b)); or

(B) If it is designed for use with clamps, is installed with two clamps at each end of the hose. Clamps must not rely on spring tension and must be installed beyond the bead or flare or over the serrations of the mating spud, pipe, or hose fitting. Installations complying with SAE J1475 are also acceptable.

(3) Nonmetallic flexible hose is also acceptable if it complies with SAE J1942 (incorporated by reference at § 27.102(b)).

(f) A positive shut-off valve must be fitted on any fuel line that supplies fuel directly to an engine or generator to stop the flow of fuel in the event of a break in the fuel line. The valve must be located near the source of supply

(for instance, at the day tank, storage tank, or fuel-distribution manifold). Furthermore, the positive shut-off valve must be operable from a safe place outside the space in which the valve is located. Each remote station for fuel shut-off should be marked in clearly legible letters at least 25 millimeters (1 inch) high indicating the purpose of the valve and the way to operate it.

(g) A new towing vessel less than 24 meters (79 feet) in length may comply with any of the following standards for fuel systems instead of the requirements of paragraph (e) of this section:

(1) ABYC H–33 (incorporated by reference at § 27.102(b)).

(2) Chapter 5 of NFPA 302 (incorporated by reference at § 27.102(b)).

(3) 33 CFR Chapter I, subchapter S (Boating Safety).

[USCG–1998–4445, 64 FR 56266, Oct. 19, 1999, as amended by USCG 1998–4445, 65 FR 52047, Aug. 28, 2000]

§ 27.345 Is a fire axe required on a new towing vessel? [Reserved]

§ 27.350 What are the requirements for a muster list on a new towing vessel? [Reserved]

§ 27.355 What are the requirements for instruction, drills, and safety orientations conducted on a new towing vessel?

(a) *Drills and instruction.* The master or person in charge of a vessel must ensure that each crewmember participates in drills and receives instruction at least once each month. The instruction may coincide with the drills, but need not. It must ensure that all crewmembers are familiar with their firefighting duties, and specifically, the following contingencies:

(1) Fighting a fire in the engine room and other locations on board the vessel, including how to—

(i) Operate all of the fire-extinguishing equipment on board the vessel;

(ii) Stop the mechanical ventilation system for the engine room if provided, and effectively seal all natural openings to the space to prevent leakage of the extinguishing agent; and

(iii) Operate the fuel shutoff for the engine room.

(2) Activating the general alarm.

(3) Reporting inoperative alarm systems and fire-detection systems.

(4) Putting on a fireman's outfit and a self-contained breathing apparatus, if the vessel is so equipped.

(b) *Alternative form of instruction.* The master or person in charge of a vessel may substitute, for the requirement of instruction in paragraph (a) of this section, the viewing of videotapes concerning at least the contingencies listed in paragraph (a), followed by a discussion led by someone familiar with these contingencies. This instruction may occur either on or off the vessel.

(c) *Participation in drills.* Drills must take place on board the vessel, as if there were an actual emergency. They must include—

(1) Participation by all crewmembers;

(2) Breaking out and using, or simulating the use of, emergency equipment;

(3) Testing of all alarm and detection systems; and

(4) At least one person putting on protective clothing, if the vessel is so equipped.

(d) *Safety Orientation.* The master or person in charge of a vessel must ensure that each crewmember who has not both participated in the drills required by paragraph (a) of this section and received the instruction required by that paragraph receives a safety orientation within 24 hours of reporting for duty.

(e) The safety orientation must cover the specific contingencies listed in paragraph (a) of this section.

[USCG–1998–4445, 64 FR 56266, Oct. 19, 1999, as amended by USCG 1998–4445, 65 FR 52047, Aug. 28, 2000]

PART 28—REQUIREMENTS FOR COMMERCIAL FISHING INDUSTRY VESSELS

Subpart A—General Provisions

Sec.